



PCT/AU2004/001212

REC'D 12 OCT 2004

WIPO

PCT

**PRIORITY
DOCUMENT**

SUBMITTED OR TRANSMITTED IN
COMPLIANCE WITH RULE 17.1(a) OR (b)

**Patent Office
Canberra**

I, JULIE BILLINGSLEY, TEAM LEADER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2003904860 for a patent by SCOTT RONALD THOMAS and VANESSA ELLEN CRUTHERS as filed on 08 September 2003.



WITNESS my hand this
Fifteenth day of September 2004

**JULIE BILLINGSLEY
TEAM LEADER EXAMINATION
SUPPORT AND SALES**

AUSTRALIA
Patents Act 1990

5

COMPLETE SPECIFICATION
PROVISIONAL PATENT

10

ROPE TENSIONER

15

The invention is described in the following statement:

ROPE TENSIONER

FIELD OF THE INVENTION

5 The invention relates to improvements in devices for the tensioning of ropes. In particular, although not exclusively, the invention is designed to overcome problems with existing rope tensioners or hitches. The problem with existing tensioners (as per prior art Patent AU610539) is the lack of tension obtained, complexity of the tensioner, cost of manufacture and the requirement to tie off the rope before tensioning can be carried out.

BACKGROUND TO THE INVENTION

10 For many people the securing and tensioning of ropes can be difficult due to the need to tie secure knots and achieve desired tension. There have been many proposals to tension rope but these have required the rope to be secured or knotted at least at one end if not both. For example prior art patent US5803209. These proposals have the disadvantage that unless the user is proficient in tying knots the rope will not be secure and it is difficult to achieve the desired tension. These problems are overcome by the present invention, which provides a rope tensioning device that accepts a single or both ends of the rope that is to be tensioned. The rope is locked in the body to enable tensioning.

DISCLOSURE OF THE INVENTION

25 In one form, although it need not be the only or indeed the broadest form, the invention is a rope tensioner which has an elongated body that accepts a single end or both ends of the rope that is to be tensioned. The rope is locked in the body to enable tensioning via a self locking system.

In another form, the invention can also be used to tension ropes that have been tied or secured at both ends.

30 Further features of the present invention will become apparent from the following detailed description.

BRIEF DESCRIPTION OF THE DRAWINGS

To assist in understanding the invention and to enable a person skilled in the art to put the invention into practical effect preferred embodiments of the invention will be described by way of example only with reference to the accompanying drawings, wherein:

FIG 1 shows two loose ends of rope being threaded through the device.

FIG 2 shows excess slack being taken up by pulling the rope through the self locking system.

FIG 3 shows the device being rotated to achieve desired tension.

FIG 4 shows the device hooked over the rope to secure.

FIG 5 shows the device being used in an alternate method where both ends have previously been tied off but the rope requires tensioning.

FIG 6 shows the device being rotated to achieve desired tension and will then be secured into position as per FIG 4.

DETAILED DESCRIPTION OF THE INVENTION

Throughout the specification the aim has been to describe the invention without limiting the invention to any one embodiment or specific collection of features. Persons skilled in the relevant art may realize variations from the specific embodiments that will nonetheless fall within the scope of the invention.

Referring to FIG 1 it can be seen that the device is a rope tensioner which has an elongated body (1) that accepts a single end or both ends of the rope that is to be tensioned via holes in the body (2).

FIG 2 shows excess slack being taken up by pulling the rope through the self locking system (3) which can be released by depressing the locking pieces at the end of use.

FIG 3 shows the device being rotated to achieve desired tension, a large amount of tension can be achieved through relatively little effort.

FIG 4 shows the device secured in position via the hook at the end of the elongated body.

5 FIG 5 shows the device being used in an alternate method where both ends have previously been tied off but the rope requires tensioning. The rope is laid over the device as shown.

FIG 6 shows the device being rotated to achieve desired tension and will then be secured into position as per FIG 4.

10

By the use of rope tensioning devices of this type, ropes for any purpose can be tensioned. Examples are: for securing loads on trailers, utility vehicles, trucks or for clamping components together during glueing. A large amount of tension can be achieved with little effort.

15

It will be realised that the rope tensioning device according to this invention is not restricted to the methods as shown in the examples but may be used in a combination of the described methods or any other suitable arrangement. For example: one end is tied off and the free end is fed through the device as per
20 FIG 1. The rope is then tensioned by laying the rope over the device as per FIG 5 and rotating as per FIG 6.

CLAIMS

The claims relating to this invention are as follows:

25

1. A rope tensioning device comprising an elongated body that accepts a single end or both ends of a rope that is to be tensioned via holes in the wasted area of the body and locked into position using a self locking system incorporated into the body of the device and secured after rotation to desired tension by the hook at the end of the device.

30

2. The rope tensioning device of claim 1 can also be used where both ends have previously been tied off but the rope requires tensioning, the rope is laid over the elongated body and rotated to achieve the desired tension and is secured using the hook at the end of the device.

3. A rope tensioning device substantially as herein described with reference to the accompanying drawings.

5

Dated this 27th day of August 2003

By

Scott Ronald Thomas

10

TVT INDUSTRIES

Followed pages of drawings

15

ABSTRACT

20

A rope tensioning device is disclosed. The device is a rope tensioning device comprising an elongated body (1) that accepts a single end or both ends of a rope that is to be tensioned via holes (2) in the wasted area of the body and locked into position using a self locking system (3) incorporated into the body of the device and secured after rotation to desired tension by the hook (4) at the

25

end of the device.

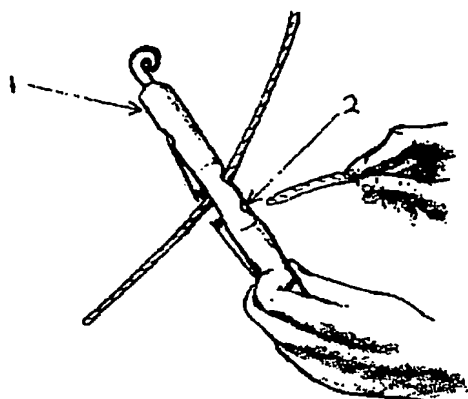


Figure 1

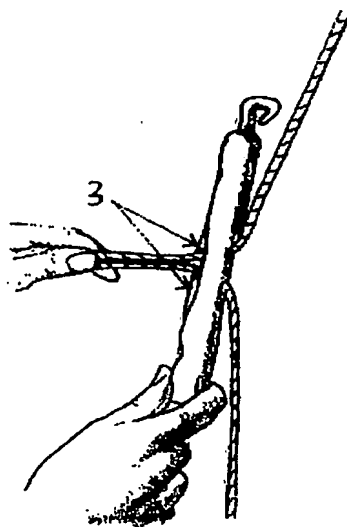


Figure 2

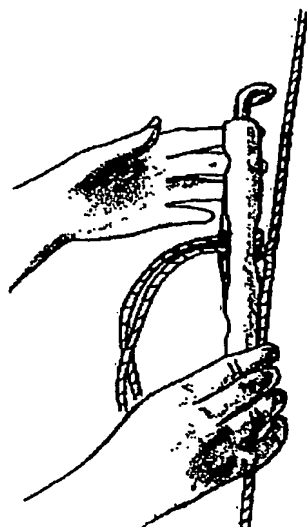


Figure 3

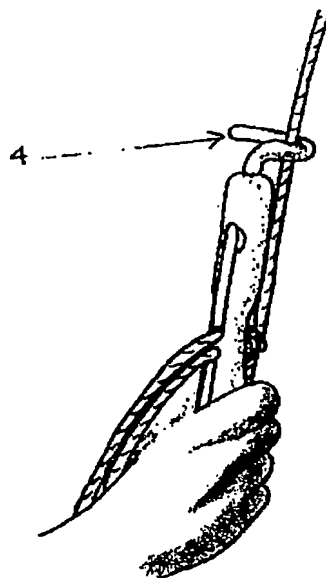


Figure 4

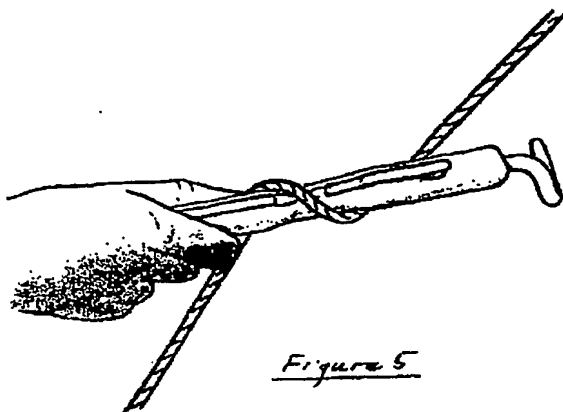


Figure 5

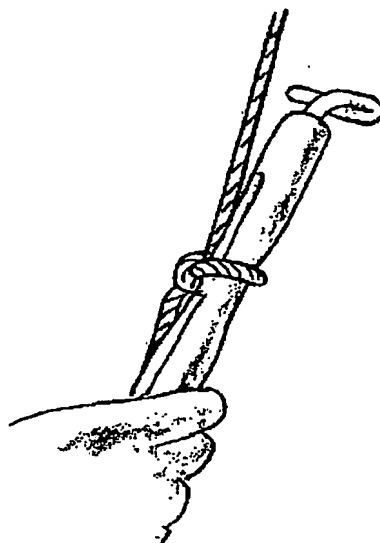


Figure 6

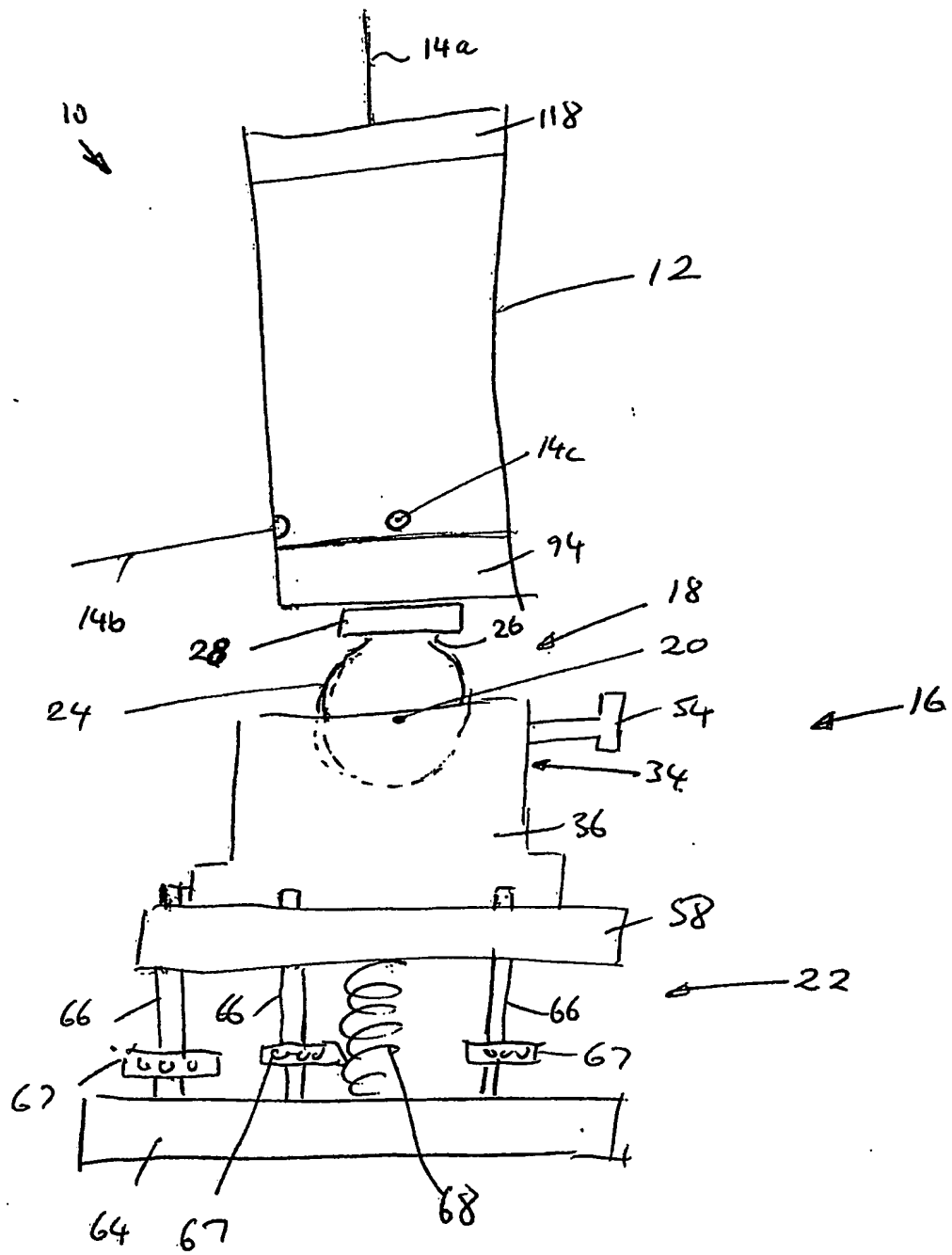
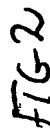
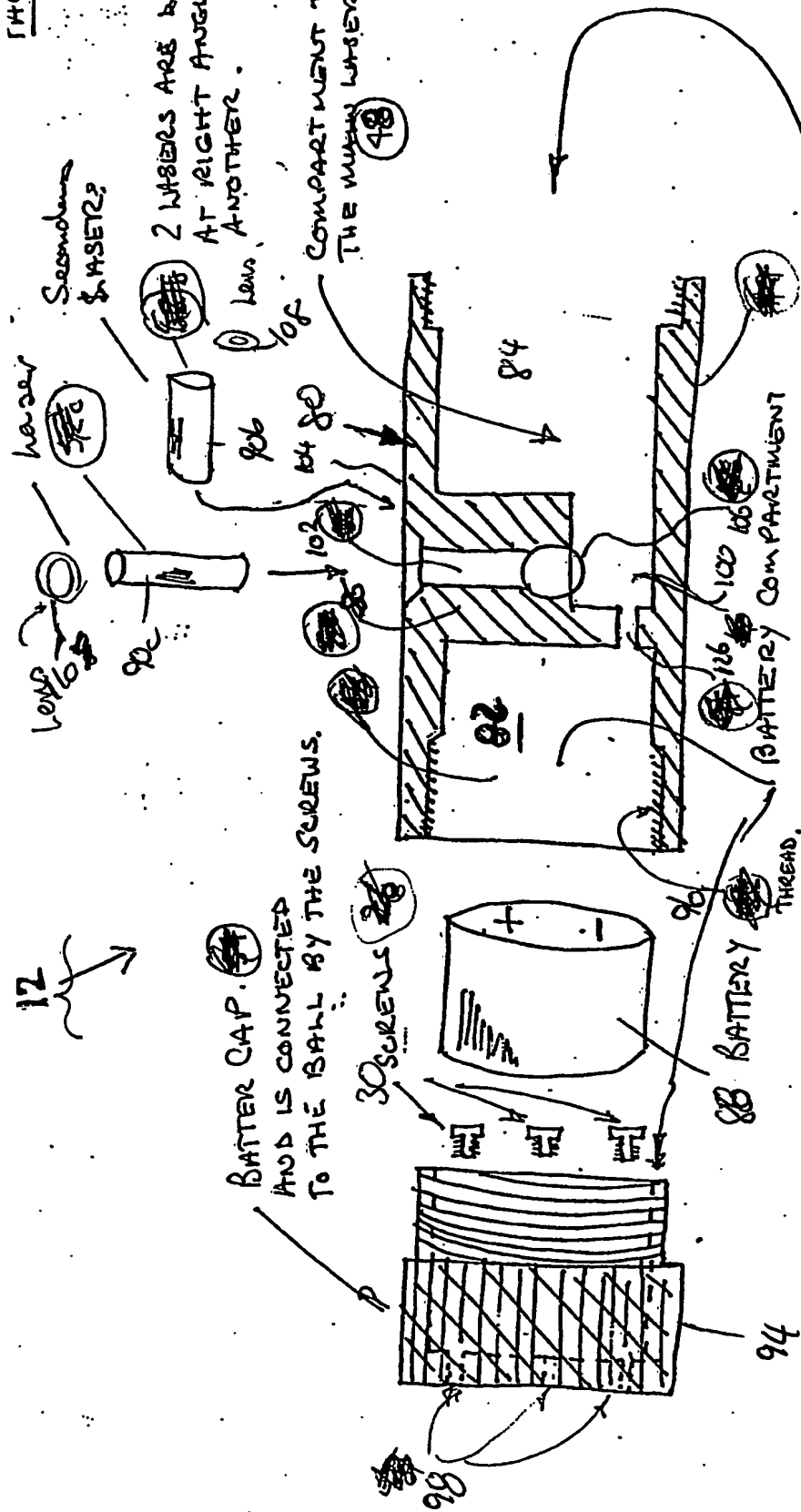


FIG 1



NOTE ON THE LOCKWELL PIECE AND BALL.

IS LOOSE INSIDE THE LOCKING CASE UNTIL
THEY ~~THE~~ LOCKING SCREW AND IS TIGHTEN
UP.



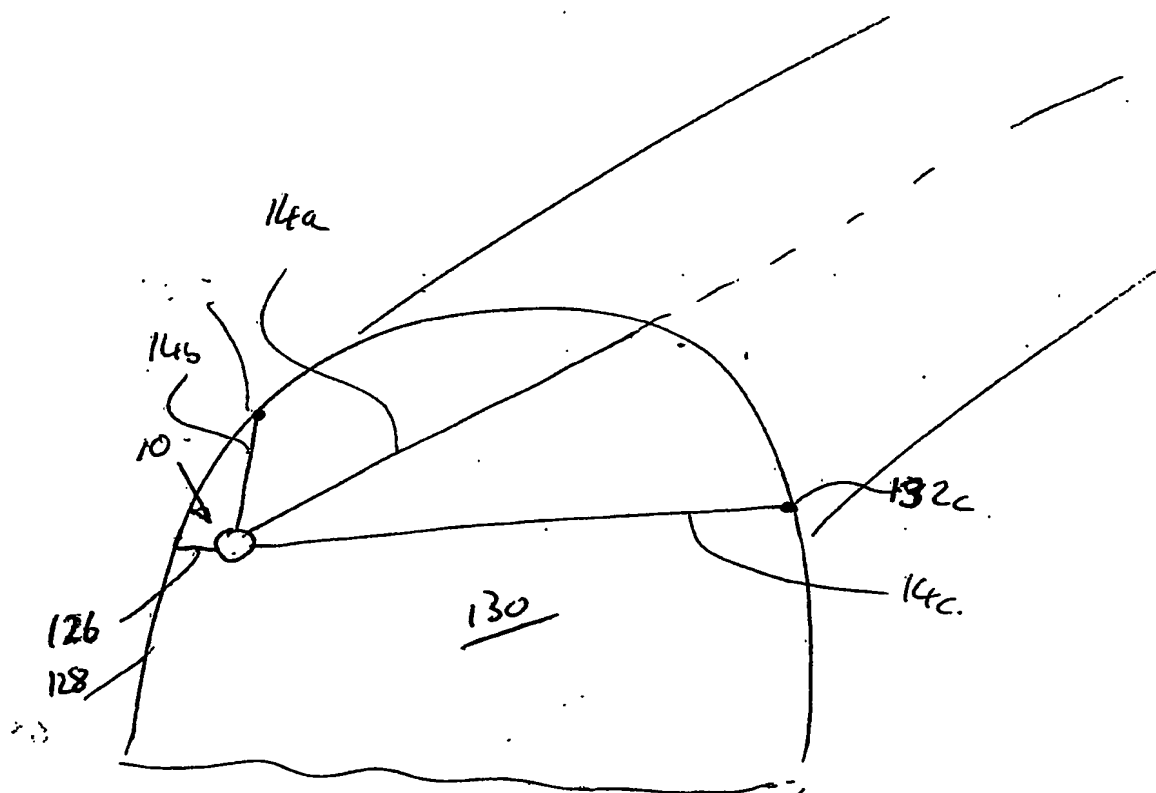


FIG 4.